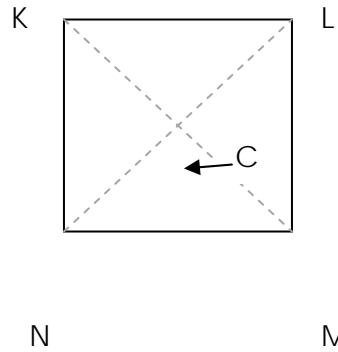


Geometry
Unit: Quadrilaterals and Polygons
Section: Squares, Rectangles and Rhombi

Review Worksheet Key

Use square KLMN to answer questions #1-3 below.



1) If KL measures 25 feet, what is the perimeter? What is the area?

$$P = 4s = 4(25) = 100 \text{ feet}$$

$$A = s^2 = 25^2 = 625 \text{ square feet}$$

2) What is the measure of angle KCL?

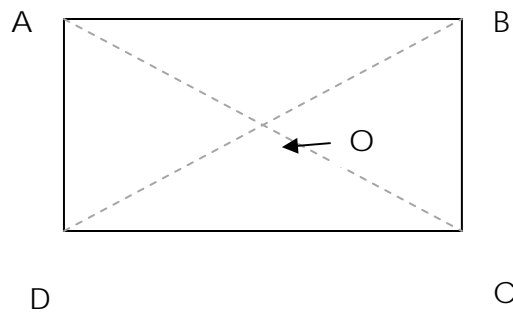
$$90^\circ$$

3) If KM has length 22 inches, what is the length of NL? What is the length of NC?

$$NL = KM = 22 \text{ inches}$$

$$NC = \frac{1}{2}NL = \frac{1}{2}(22) = 11 \text{ inches}$$

Use rectangle ABCD to answer questions #4-5 below.



4) If angle ABC measures $(4x - 2)^\circ$, find the value of x.

$$4x - 2 = 90$$

$$4x = 92$$

$$x = 23$$

5) If $AB = 2x - 22$, $DC = x + 4$ and $AD = 10$, find the perimeter and area.

$$2x - 22 = x + 4$$

$$2x = x + 26$$

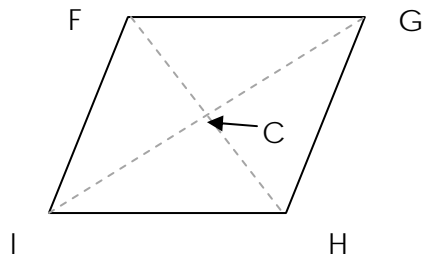
$$x = 26$$

$$AB = 2(26) - 22 = 30$$

$$\text{Perimeter} = 2AB + 2AD = 2(30) + 2(10) = 80 \text{ units}$$

$$\text{Area} = AB \cdot AD = 30 \cdot 10 = 300 \text{ square units}$$

Use rhombus FGHI to answer questions #6-7 below.



6) If angle ICH measures $(5x - 15)^\circ$, find the value of x .

$$5x - 15 = 90$$

$$5x = 105$$

$$x = 21$$

7) If $FH = 10$ and $IG = 12$, what is the perimeter and area?

$$FC = \frac{1}{2}FH = \frac{1}{2}(10) = 5$$

$$GC = \frac{1}{2}IG = \frac{1}{2}(12) = 6$$

$$FC^2 + GC^2 = FG^2$$

$$5^2 + 6^2 = FG^2$$

$$25 + 36 = FG^2$$

$$61 = FG^2$$

$$FG = 7.75$$

$$P = 4FG = 4(7.75) = 31 \text{ units}$$

$$A = \frac{1}{2}(FH \cdot IG) = \frac{1}{2}(10 \cdot 12) = 60 \text{ square units}$$